## ONE

# **Cessna 182 Normal Takeoff**

ONE

### **Before Starting**

- 1. Preflight Inspection -- COMPLETE
- 2. Seats, Belts, Shoulders Harness -- ADJUST and LOCK.
- 3. Fuel Selector Valve -- BOTH
- 4. Avionics Power Switch, Electrical Equipment & Auto Pilot -- OFF.

#### \*\* Caution \*\*

Avionics Power Switch MUST BE OFF During Engine Start to Prevent Possible Damage to the Avionics.

- 5. Brakes -- TEST AND SET
- 6. Cowl Flaps -- OPEN ( Move lever out of locking hole to reposition ).
- 7. Circuit Breakers -- IN

### **Starting Engine**

- 1. Mixture -- FULL RICH
- 2. Propeller -- High RPM
- 3. Carburetor Heat -- COLD
- 4. Throttle -- OPEN 1/2 INCH
- 5. Prime -- AS REQUIRED
- 6. Master Switch -- ON
- 7. Propeller Area -- CLEAR
- **8.** Ignition Switch -- **START** (release when engine starts).

NOTE: If Engine Has Been Overprimed, Start With Throttle 1/4 to1/2 Open.

Reduce Throttle to Idle When Engine Starts.

9. Oil Pressure -- CHECK

#### **Before Takeoff**

- 1. Cabin Doors and Windows -- CLOSED and LOCKED
- 2. Parking Brake -- SET
- 3. Flight Controls -- FREE AND CORRECT
- **4.** Flight Instruments -- <u>SET</u> -- Radios, Transponder, Altimeter, Gages in the green.
- 5. Fuel Selector Valve -- BOTH
- 6. Mixture -- FULL RICH
- 7. Elevator and Rudder Trim -- TAKEOFF
- 8. Throttle -- 1700 RPM
  - **A.** Magnetos -- **CHECK** (RPM drop should not exceed 150 RPM on either magneto or 50 RPM Differential between magnetos).
  - **B.** Propeller -- **CYCLE** from high to low, Return to HIGH RPM (full in).
  - **C.** Carburetor Heat -- **CHECK** (for RPM drop)
  - **D.** Engine Instruments and Ammeter -- **CHECK**.
  - E. Suction Gage -- CHECK

**Reduce Throttle** 

- 9. Avionics Switch -- ON
- 10. Radios-- SET
- 11. Autopilot (if installed) -- OFF
- 12. Flashing Beacon, Navigation Lights and/or Strobe Lights -- ON

as required

- 13. Throttle Friction Lock -- ADJUST
- 14. Parking Brake -- RELEASED

### **Normal Takeoff**

- 1. Wing Flaps-- 0\*~ 20\*
- 2. Carburetor Heat-- COLD
- 3. Power-- FULL THROTTLE and 2400 RPM
- 4. Elevator Control-- LIFT NOSE WHEEL at 50 KIAS
- Climb Speed-- <u>70 KIAS</u> ( Flaps 20\* )
   <u>80 KIAS</u> ( Flaps up )

#### **Short Field Takeoff**

- 1. Wing Flaps-- 20\*
- 2. Carburetor Heat-- COLD
- 3. Brakes-- APPLIED
- 4. Power-- FULL THROTTLE and 2400 RPM
- 5. Brakes-- RELEASE
- 6. Elevator Control-- MAINTAIN SLIGHTLY TAIL LOW ATTITUDE
- 7. Climb Speed-- 57 KIAS ( until obstacles are cleared )
- 8. Wing Flaps-- RETRACT Slowly after reaching 70 KIAS

#### **Normal Climb**

- 1. Airspeed -- 85 95 KIAS
- 2. Power -- 23 INCHES Hg and 2400 RPM
- 3. Fuel Selector Valve -- BOTH
- 4. Mixture -- FULL RICH ( mixture may be leaned above 5000 feet )
- 5. Cowl Flaps -- OPEN as required

#### **Max. Performance Climb**

- 1. Airspeed -- 78 KIAS @ Sea level to 72 KIAS at 10,000 feet
- 2. Power -- FULL THROTTLE and 2400 RPM
- 3. Fuel Selector Valve -- Both
- 4. Mixture -- FULL RICH ( Mixture may be leaned above 5000 feet )
- 5. Cowl Flaps -- FULL OPEN

### Normal Cruise

- 1. Power-- 15~23 INCHES Hg, 2100~2400 ( no more than 75% Power )
- 2. Elevator and Rudder Trim -- ADJUST
- 3. Mixture -- LEAN AS REQUIRED
- 4. Cowl Flaps -- CLOSED

## **Power Settings**

	<b>75% POWER</b>		<u>65% POWER</u>		<u>55% POWER</u>	
Altitude	RPM / MP	KTAS	RPM / MP	KTAS	RPM / MP	KTAS
4000 Ft.	24 / 22	139	22 /22	131	21 / 20	121
6000 Ft.	24 / 22	143	22 / 21	133	21 / 19	121
8000 Ft.	24 / 21	144	22 / 20	135	21 / 19	125
10,000 Ft	24 / 20	143	22 / 20	137	21 / 19	128
12,000 Ft.	24 / 18	140	22 / 18	129	21 / 16	114

Standard Conditions

Zero Wind



This Check List is not to be used as a substitution for the Owners Manual.

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